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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/567,480

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EXAMINER

HICKS, VICTORIA J

ART UNIT

PAPER NUMBER

3772

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/567,480	Applicant(s) SCHLOESSER ET AL.	
	Examiner VICTORIA HICKS	Art Unit 3772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 April 2010 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/8/10</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to the amendment filed on 4/26/10.

Claim 1 was cancelled by Applicant.

Response to Arguments

Applicant's arguments, with respect to the rejection of claims 2-15 and 19-21 under 35 U.S.C. 112, second paragraph have been fully considered and are persuasive. The rejection of claims 2-15 and 19-21 under 35 U.S.C. 112, second paragraph has been withdrawn. Applicant's amendment to the drawings is sufficient to overcome the examiner's previous objection to the drawings. Applicant's amendment to claims 3, 4 and 8 is sufficient to overcome the examiner's previous rejection of claims 3, 4 and 8 under 35 U.S.C. 112, second paragraph.

Applicant's arguments with respect to claims 2-21 have been considered but are moot in view of the new ground(s) of rejection.

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: opposite end 66. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures

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appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 3, 4, 8, 10, 14 and 21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. These claims were amended to recite the "substantial" shape and direction of device structures. No support has been provided in the specification for these claim limitations.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 2, 5-7, 9, 11-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Pauli (US patent 6,442,777).

In regards to claim 2, Pauli teaches in Figures 1 and 2, column 2, lines 64-67 and column 4, lines 22-32 a frame (15, 18, 19); a projection extending from one end of the frame, the projection defining a pivot point; a first assembly (17, 18) connectable to a second end of the frame (15, 18, 19), the first assembly (17, 18) including a vertically-oriented bearing (17) having a first end and a second end, the first end extending through an opening (sleeve 18) in the frame (15, 18, 19), the second end of the frame (15, 18, 19) configured to move along the vertically-oriented bearing (17) to provide a first range of motion of the frame (15, 18, 19) relative to the couch (7, 14) about the pivot point; and a second assembly (7, 8, 10, 14) including a horizontally-oriented bearing (8), the second end of the vertically-oriented bearing (17) configured to move along the horizontally-oriented bearing (8) to provide a second range of motion of the frame (15, 18, 19) relative to the couch (7, 14) about the pivot point.

U.S. Patent Sep. 3, 2002 Sheet 2 of 2 US 6,442,777 B1

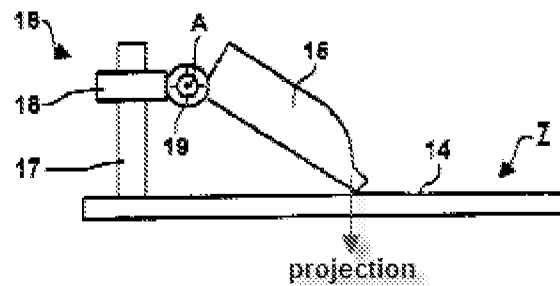


FIG 2

In regards to claim 5, Pauli teaches the apparatus of claim 2. Pauli teaches in Figures 1 and 2, column 2, lines 64-67 and column 4, lines 22-32 that the first range of motion comprises one of a pitch rotation, a roll rotation, and a yaw rotation and the second range of motion comprises one of a pitch rotation, a roll rotation, and a yaw rotation.

In regards to claim 6, Pauli teaches the apparatus of claim 2. Pauli teaches in Figures 1 and 2, column 2, lines 64-67 and column 4, lines 22-32 that the first range of motion is different than the second range of motion.

In regards to claim 7, Pauli teaches the apparatus of claim 2. Pauli teaches in Figures 1 and 2 and column 4, lines 22-32 that the first assembly (17, 18) comprises a track (17) and a carriage (18) connected to the frame (15, 18, 19), the carriage (18) adapted to move along the track (17).

In regards to claim 9, Pauli teaches the apparatus of claim 2. Pauli teaches in Figure 1 and column 2, lines 64-67 that the second assembly (7, 8, 10, 14) comprises a track (8) and a carriage (7, 10, 14) adapted to move along the track.

In regards to claim 11, Pauli teaches the apparatus of claim 2. Pauli teaches in Figures 1 and 2 and column 4, lines 22-32 a third assembly (19) connectable to the second end of the frame (15, 18, 19), the third assembly (19) operable to provide a third range of motion of the frame (15, 18, 19) relative to the couch (7, 14) about the pivot point.

In regards to claim 12, Pauli teaches the apparatus of claims 1 and 11. Pauli teaches in Figure 2 and column 4, lines 22-32 that the third range of motion comprises one of a pitch rotation, a roll rotation, and a yaw rotation.

In regards to claim 13, Pauli teaches the apparatus of claims 2 and 11. Pauli teaches in Figure 2 and column 4, lines 22-32 that the third range of motion is different than the first range of motion.

In regards to claim 14, Pauli teaches the apparatus of claims 2 and 11. Pauli teaches in Figure 1, column 2, lines 64-67 and column 4, lines 22-32 the second assembly (7, 8, 10, 14) comprises a track (8) and a carriage (7, 10, 14) adapted to move in a substantially horizontal direction along the track (8), and wherein the third assembly (19) comprises a shaft (joint 19 which would naturally include a slender rod, pin or shaft) having a first end connectable to the frame (15, 18, 19) and a second end connectable to carriage (7, 10, 14) of the second assembly (7, 8, 10, 14), the second end of the shaft (joint 19 which would naturally include a slender rod, pin or shaft)

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adapted to be pivotable with respect to the carriage (7, 10, 14) of the second assembly (7, 8, 10, 14).

In regards to claim 15, Pauli teaches the apparatus of claims 2, 11 and 14. Pauli teaches in Figures 1 and 2, column 2, lines 64-67 and column 4, lines 22-32 that the third assembly (19) provides roll movement of the frame (15, 18, 19) relative to the couch (7, 14) as the second end of the shaft (joint 19 which would naturally include a slender rod, pin or shaft) pivots with respect to the carriage (7, 10, 14) of the second assembly (7, 8, 10, 14).

In regards to claim 16, Pauli teaches in Figures 1 and 2, column 2, lines 64-67 and column 4, lines 22-32 a frame (15, 18, 19) adapted to support a body part, the frame (15, 18, 19) having a first axis; a first assembly (17, 18) adapted to move the body part about the first axis; a second assembly (7, 8, 10, 14) adapted to move the body part about a second axis oriented perpendicular with respect to the first axis; and a third assembly (19) adapted to move the body part about a third axis oriented perpendicular with respect to the first axis and the second axis.

In regards to claim 17, Pauli teaches the apparatus of claim 16. Pauli teaches in Figures 1 and 2, column 2, lines 64-67 and column 4, lines 22-32 that the first axis, the second axis, and the third axis intersect at a common point. All axes, by nature, intersect at a common point.

In regards to claim 18, Pauli teaches the apparatus of claim 16. Pauli teaches in Figures 1 and 3, column 2, lines 64-67 and column 4, lines 22-32 a component (the projection defined in the rejection of claim 1 above) extending from one end of the frame

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(15, 18, 19), the component defining a pivot point, and wherein the first assembly (17, 18) is operable to provide pitch movement of the body part about the pivot point, and wherein the second assembly (7, 8, 10, 14) is operable to provide yaw movement of the body part about the pivot point, and wherein the third assembly (19) is operable to provide roll movement of the body part about the pivot point.

In regards to claim 19, Pauli teaches in Figures 1 and 3, column 2, lines 64-67 and column 4, lines 22-32 a frame (15, 18, 19), at least a portion of which is connected to the couch (7, 14), the frame (15, 18, 19) including a component (the projection defined in the rejection of claim 1 above) extending from the frame (15, 18, 19), a first assembly (17, 18) coupled to the frame (15, 18, 19), a second assembly (7, 8, 10, 14) coupled to the frame (15, 18, 19), and a third assembly (19) coupled to the frame (15, 18, 19), the component defining a pivot point remote from the first assembly (17, 18), the second assembly (7, 8, 10, 14), and the third assembly (19), the component and the first assembly (17, 18) configured adapted to provide pitch movement, the component and the second assembly (7, 8, 10, 14) configured to provide yaw movement, and the component and the third assembly (19) configured to provide roll movement of the frame (15, 18, 19) relative to the couch (7, 14) about the pivot point.

In regards to claim 20, Pauli teaches the apparatus of claim 19. Pauli teaches in Figures 1 and 3, column 2, lines 64-67 and column 4, lines 22-32 a first assembly (17, 18) connectable to the frame (15, 18, 19) and adapted to provide the pitch movement of the frame (15, 18, 19) relative to the couch (7, 14) about the pivot point, and further comprising a second assembly (7, 8, 10, 14) connectable to the first assembly (17, 18)

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and adapted to provide the yaw movement of the frame (15, 18, 19) relative to the couch (7, 14) about the pivot point, and further comprising a third assembly (19) connectable to the first assembly (17, 18) and the second assembly (7, 8, 10, 14) and adapted to provide the roll movement of the frame (15, 18, 19) relative to the couch (7, 14) about the pivot point.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 4, 8, 10 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pauli (US patent 6,442,777).

In regards to claim 3, Pauli teaches the apparatus of claim 2. Pauli discloses the claimed invention except for the projection being substantially spherical-shaped. It would have been obvious to one having ordinary skill in the art at the time of invention to provide the projection being substantially spherical-shaped, since it has been held that a change in the shape of a prior art device is a design consideration within the skill of the art. *In re Dailey*, 357 F. 2d 669, 149 USPQ 47 (CCPA 1966).

In regards to claim 4, Pauli teaches the apparatus of claim 2. Pauli discloses the claimed invention except for the projection being substantially semi-spherical-shaped. It would have been obvious to one having ordinary skill in the art at the time of invention

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to provide the projection being substantially semi-spherical-shaped, since it has been held that a change in the shape of a prior art device is a design consideration within the skill of the art. *In re Dailey*, 357 F. 2d 669, 149 USPQ 47 (CCPA 1966).

In regards to claim 8, Pauli teaches the apparatus of claims 2 and 7. Pauli teaches in Figures 1 and 3 and column 4, lines 22-32 that the track (17) is oriented in a substantially vertical plane, the first assembly (17, 18) providing a pitch movement of the frame (15, 18, 19) relative to the couch (7, 14) as the carriage (18) moved along the track (17) in a substantially vertical direction. Pauli discloses the claimed invention except for the track being arcuately-shaped. It would have been obvious to one having ordinary skill in the art at the time of invention to provide the track being arcuately-shaped, since it has been held that a change in the shape of a prior art device is a design consideration within the skill of the art. *In re Dailey*, 357 F. 2d 669, 149 USPQ 47 (CCPA 1966).

In regards to claim 10, Pauli teaches the apparatus of claims 2 and 9. Pauli teaches in Figure 1 and column 2, lines 64-67 that the track (8) is oriented in a substantially horizontal plane, the second assembly (7, 8, 10, 14) providing yaw movement of the frame (15, 18, 19) relative to the couch (7, 14) as the carriage (7, 10, 14) moves along the track (8) in a substantially horizontal direction. Pauli discloses the claimed invention except for the track being arcuately-shaped. It would have been obvious to one having ordinary skill in the art at the time of invention to provide the track being arcuately-shaped, since it has been held that a change in the shape of a prior art

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device is a design consideration within the skill of the art. *In re Dailey*, 357 F. 2d 669, 149 USPQ 47 (CCPA 1966).

In regards to claim 21, Pauli teaches the apparatus of claim 19. Pauli discloses the claimed invention except for the component being substantially spherical-shaped. It would have been obvious to one having ordinary skill in the art at the time of invention to provide the component being substantially spherical-shaped, since it has been held that a change in the shape of a prior art device is a design consideration within the skill of the art. *In re Dailey*, 357 F. 2d 669, 149 USPQ 47 (CCPA 1966).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to VICTORIA HICKS whose telephone number is (571)270-7033. The examiner can normally be reached on Monday through Thursday, 7:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on (571) 272-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/V. H./
Examiner, Art Unit 3772
7/29/10

/LoAn H. Thanh/
Supervisory Patent Examiner, Art Unit 3764